

CLAIMS

1. Top dresser for dispensing material to a surface comprising, in combination: a hopper for containing top dressing material and movably supported relative to the surface; at least a first spinner rotatable about a vertical axis in a rotation direction, with the spinner including a circular disk of a diameter and having a center corresponding to the vertical axis, with the circular disk being generally perpendicular to the vertical axis and including a top, with the spinner further including a plurality of fins on the top of the circular disk and in a radial orientation, with the spinner being movable along the surface in an operation direction generally perpendicular to the vertical axis and with the circular disk being generally parallel to the surface with top dressing material being dispensed from the hopper onto the top of the circular disk at an infeed radial position; and a diverter located in the rotation direction past the infeed radial position, with the diverter having a forward end spaced from the circular disk and located intermediate the infeed radial position and the maximum rearward extent of the circular disk in the operation direction.

2. The top dresser of claim 1 with the diverter having a lower edge spaced vertically above the top of the circular disk.

3. The top dresser of claim 2 with the lower edge located at differing spacing above the top of the circular disk.

4. The top dresser of claim 3 with the lower edge having a first portion generally parallel to the top of the circular disk from the forward edge to a point along a tangent to the circular disk parallel to the operation direction and generally not extending within the diametric extent of the circular disk, with the lower edge having a second portion extending from the first portion and of increasing vertical spacing above the top of the circular disk.

5. The top dresser of claim 4 with the diverter having a rearward edge opposite to the forward edge, with the rearward edge being radially spaced intermediate the forward edge and the maximum rearward extent in the operation direction.

6. The top dresser of claim 5 with the rearward edge located in front of the maximum rearward extent in the operation direction.

7. The top dresser of claim 1 further comprising, in combination: a second spinner rotatable about a vertical axis spaced from and parallel to the vertical axis of the first spinner, with the second spinner being rotatable in an opposite rotation direction than the rotation direction of the first spinner to create a rearward downstream nip in the operation direction, with the diverter being generally V-shaped and positioned in the downstream nip of the first and second spinners.

8. The top dresser of claim 1 with the diverter having a rearward edge opposite to the forward edge, with the rearward edge being radially spaced intermediate the forward edge and the maximum rearward extent in the operation direction.

9. Top dresser for dispensing material to a surface comprising, in combination: a hopper for containing top dressing material and movably supported relative to the surface; at least a first spinner rotatable about an axis in a rotation direction, with top dressing material being dispensed from the hopper to the spinner and being propelled radially from the spinner by rotation of the spinner at a thickness; and a diverter extending in a nonradial direction from the axis and preventing passage of top dressing material therethrough, with the diverter having an edge extending at different distances into the thickness of the propelled top dressing material.

10. The top dresser of claim 9 with the diverter including a portion of the edge which has linearly decreasing distances into the thickness of the propelled top dressing material.

11. The top dresser of claim 10 with the top dressing material being dispensed at an infeed radial position, with the spinner being movable along the surface in an operation direction, with the diverter including a portion of the lower edge radially spaced outward of a tangent to the spinner parallel to the operation direction extending a constant distance into the thickness.

12. The top dresser of claim 11 with the constant distance being less than the thickness.

13. The top dresser of claim 12 with the portions of the edge being in a single plane.

14. Method for dispensing top dressing material to a surface comprising: rotating a spinner about an axis; dispensing top dressing material to the rotating spinner to

be propelled radially from the spinner by rotation of the spinner at a thickness; and extending an edge of a diverter into the thickness of the propelled top dressing material, with the edge having different distances into the thickness of the propelled top dressing material.

15. Spinner assembly comprising, in combination: a spinner rotatable about an axis; a sheet located perpendicular to the axis and extending parallel to the spinner; an opening formed in the sheet for directing material to the spinner; a slot formed in the sheet; and a diverter having a shape insertable through the slot, with the diverter being positionable in a first position which does not detrimentally extend beyond the plate towards the spinner and in a second position extending beyond the plate towards the spinner.

16. The spinner assembly of claim 15 with the sheet comprising, in combination: a mount extending generally perpendicular to the sheet; a bracket extending from the diverter, with one of the bracket and the mount including a channel elongated generally perpendicular to the sheet and the other including a threadable bolt having a hand knob extending through the channel for allowing adjustable positioning of the mount relative to the bracket.

17. The spinner assembly of claim 16 with the slot and the diverter being V-shaped.

18. The spinner assembly of claim 17 with the diverter including a lower edge of a configuration which does not extend in a single plane perpendicular to the axis, with portions of the lower edge located in the slot in the first position and remaining portions of the lower edge not extending in the slot in the first position.

19. The spinner assembly of claim 15 with the diverter including a lower edge of a configuration which does not extend in a single plane perpendicular to the axis, with portions of the lower edge located in the slot in the first position and remaining portions of the lower edge not extending in the slot in the first position.

20. Top dresser comprising, in combination: a hopper for containing top dressing material, with the hopper including a bottom and a back; a conveyor located at the bottom of the hopper so as to have top dressing material contained in the hopper gravitationally discharged on the conveyor to be conveyed to the back of the hopper; an

opening formed in the back of the hopper; and a gate moveable relative to the opening and adjustable in a first range of spacings from the conveyor and adjustable in a second range of spacings from the conveyor different than the first range of spacings, with the gate being prevented from being manually moved inadvertently between the first and second ranges of spacings.

21. The top dresser of claim 20 with the gate being spaced farther from the conveyor in the second range of spacings than in the first range of spacings, with a mechanical audible signal being provided when the gate is moved from the second range of spacings to the first range of spacings.

22. The top dresser of claim 21 with the gate being prevented from moving from the first range of spacings to the second range of spacings unless additional manual actuation other than to the gate occurs.

23. The top dresser of claim 20 further comprising, in combination: a retractable plunger moveable between an extended position and a retracted position, with the gate moving along a movement path between the first and second range of spacings, with the plunger in the extended position abutting with the gate in the movement path.

24. The top dresser of claim 23 with the gate including a side plate extending parallel to the movement path and at a nonparallel angle to the plunger, with the plunger having a free end slideable upon the side plate in the retracted position and abutting with the side plate in the extended position.

25. The top dresser of claim 20 with the gate being spaced farther from the conveyor in the second range than in the first range, with the gate being prevented from moving from the first range to the second range unless additional manual actuation other than to the gate occurs.